

EasyLube[®] Nexus

Smart Total Lubrication Maintenance System



EasyLube[®] Nexus Automatic Lubricator



EasyLube[®] Nexus Gateway



EasyLube[®] Surface Temperature Sensor



EasyLube[®] LINK

The manufacturer HORNACHE CORPORATION also adheres to the spirit of continuous R&D and improvement. In order to continuously improve product quality and performance, HORNACHE CORPORATION reserves the right to modify product appearance, specifications and warranty terms. Any changes can be made without prior notice.

Nexus Research Development Preface

The manufacturer Hornche has been focusing on the bearing lubrication and maintenance field for more than 30 years. We deeply understand that unplanned downtime of equipment during operation is the main challenge faced by most maintenance management engineers. In fact, predictive maintenance has been listed as a strategic priority to solve this problem. Yet we have found that hazardous industries such as oil industries, gas supply facilities, chemical production, metal smelting, or mining areas are among the slowest industries to adopt data technology management.

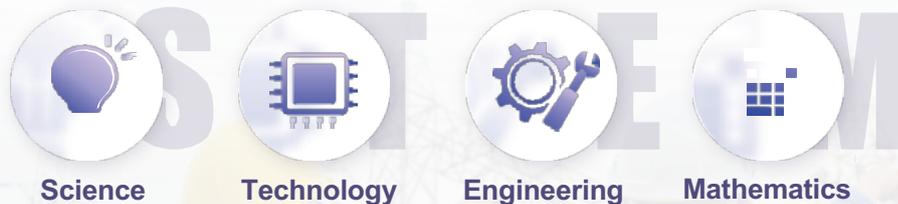


Nexus is the latest research and development of data technology. It can provide companies operating in hazardous industries with better monitoring, automatic lubrication and maintenance of bearings, reduce workers' exposure to hazardous environments to improve safety, and reduce the possibilities of human error during maintenance. This includes equipment for continuous operation in the harshest industrial environments and hazardous areas, high temperatures, pollution, vibration stress and outdoor weather. Preventing and reducing the occurrence of unplanned downtime is an unavoidable, serious and costly challenge that most maintenance management engineers will face.

The sheer number of motors, exhaust fans, water pumps, driving facilities, heating equipment, and other assets installed in an industrial factory makes managing maintenance work a daunting task which is time-consuming and will increase the likelihood of machine failure. In addition, many facilities are scattered or located in remote locations and even in dangerous areas. Hence, it is very important to implement on-site inspections and understand the operating efficiency of equipment. Therefore, the maintenance team's work time must be taken into consideration to prevent unnecessary delays to make remote monitoring more beneficial to achieve maximum efficiency.

Finally, the implementation of data technologies, especially condition monitoring, enables a predictive rather than reactive approach to maintenance. Industry 4.0 is a short terminology for digital, including lubrication specifications, grease injection measures, data sources and analysis of the overall planning and execution method. It enables maintenance managers all over the world to conduct remote control, status analysis and data transmission to ensure equipment operation, maintenance, monitoring and management through the assistance of data. Most importantly, these technologies enable them to make better informed decisions about maintenance needs and to identify and diagnose problems faster. Gain a holistic view of Nexus asset performance, and it can be done with low cost smart sensing and monitoring technology.

EasyLube® Four Cores and Brand Concept



The integration and application of Science, Technology, Engineering, Mathematics (STEM) has attracted the attention of many first world countries and large enterprises in recent years. The manufacturer Hornche has fully committed research and development under this basis, fully applied to the integration, application, and technological innovation in all aspects of bearing lubrication, factory maintenance and operation management.

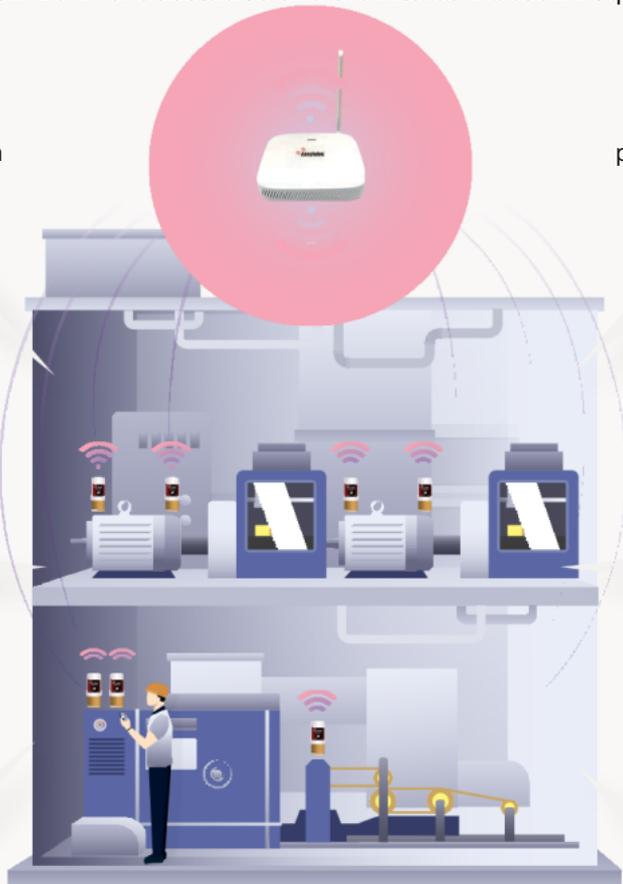
EasyLube® Noxus has a good STEM design, which is one of the main strategies for enterprises to promote bearing lubrication and maintenance management teachings. It can help enterprises implement automatic machine operation and correct information processing, and improve the scientific management of bearing lubrication and maintenance of factory equipment. It will truly demonstrate the R&D and innovation achievements of **EasyLube® Noxus**.

What is Smart Equipment Lubrication Management ?

A Smart Automatic Lubrication Management System integrating Science, Technology, Engineering and Mathematics

Cloud Wireless Transmission

One **Easylube[®] Gateway** can cover 1000 automatic grease lubricators within a range of 2 kilometers (depending on environment obstacles and the interconnection frequency influences)



Calculation program for bearing lubrication specification



Execute greasing and re-greasing interval accurately based on each bearing's specification



E-Management of on-site patrol inspection with RFID R/W function



Real-time notification of proactive abnormalities detection



Set up a calendar for replacing consumables



History of equipment maintenance records



Simplicity is the ultimate form of precision

Allows you to remotely grasp the lubrication operation information, real-time abnormal notification, and adaptation operation in the factory anywhere and anytime easily.



EasyLube® Nexus Automatic Lubricator

Product Model : 250 Nexus

Enhanced Security Protection Design



Scan the QR code to download now



EasyLube® LINK

- ◆ Safe and Explosion-proof Transparent Housing Safety
- ◆ Structure without Buttons and Light Holes
- ◆ Active Smart Safety Circuit Protection System
- ◆ Non-sparking Safety Drive Motor
- ◆ High and Low Temperature Resistance, Dustproof, Waterproof, Shockproof
- ◆ Conforms to Multiple International Certifications    
- ◆ The research and development technology has obtained 5 patents M633444、M632433、M632432、M632431、M632430

Safe and Explosion-proof Transparent Housing

The Nexus wireless transmission automatic lubricator series adopts a special safety and explosion-proof housing, which can completely withstand various harsh environments; it has a wide-angle tri-color LED indicator light which can be easily identified intuitively.



-  Greasing Complete
-  Normal Operation
-  Abnormal Pressure
-  Low Battery

High-Quality ODM Consumables (Recommended by Calculation with Bearing Operating Conditions)

EasyLube® Nexus Pak is the consumables designated by the original manufacturer. It adheres to the MQL calculation specifications professionally. The "grease bag" and explosion-proof lithium battery that meet the environmental protection requirements are more convenient, economical and high-quality.



Dual Layer Cup Design and Inspection Direction Positioning

EasyLube® Nexus Pak is a replica of the dual layer grease cup and bag design created in 1992. The outer cup is made of high-strength temperature-resistant, impact-resistant material, which can withstand harsh external environment for a long time; the inner cup is designed for economy, convenience, and easy replacement, reducing the cost of consumables and saving long-term maintenance cost (only need to replace the inner grease bag). It is affordable and economical! The outer cup is directly fixed on the equipment, completely avoiding disassembly and re-assembly. It is convenient for adjusting the direction of the lubricator signal light hence benefiting light signal inspection and on-site sensing during routine patrols.



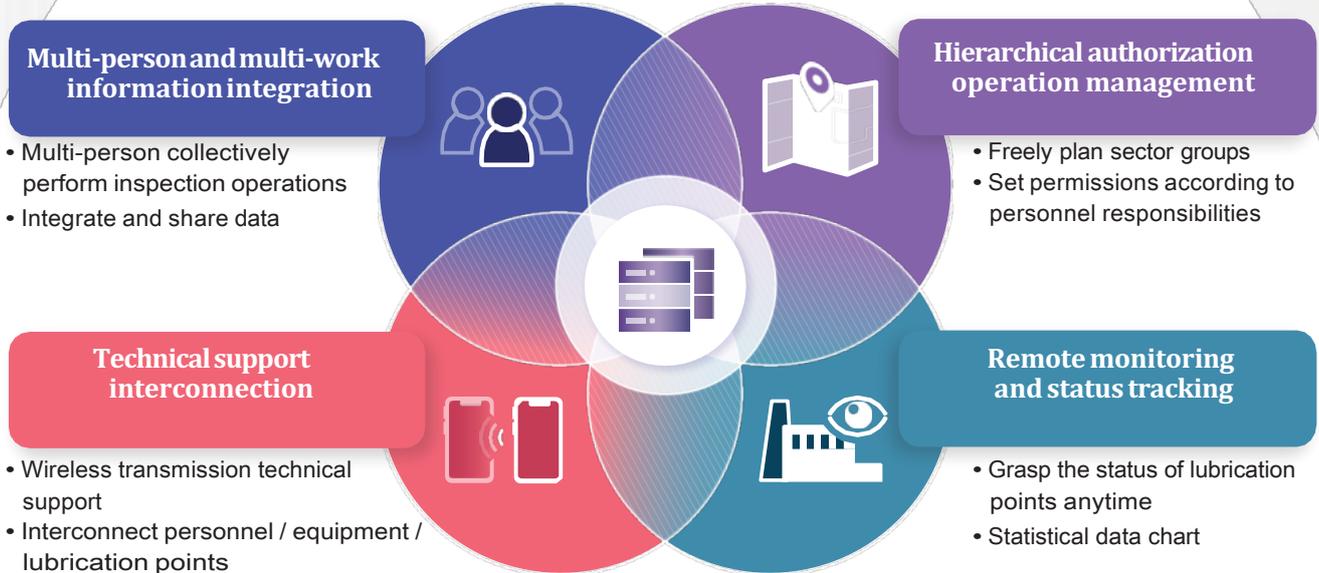
Note: The remake is an EOL product that undergoes a series of modifications to be reproduced or redistributed. Retaining advantages of the ease to replace the grease pack and has low cost. The lithium battery can be reused until [low battery warning] due to the advancement of circuit management technology and then replaced.

-  NX-250-1000N High-Speed Inner Cup
-  NX-250-2000N High-Efficiency Inner Cup
-  NX-250-1500N Multi-Purpose Inner Cup
-  NX-250-5000N Food Grade Inner Cup

Coding Principle: Nexus Series + Capacity + Grease Cup Specification

EasyLube® LINK Wireless Remote Control Management Software

EasyLube® LINK has four cores: 1. Hierarchical authorization operation management, 2. Multi-person and multi-work information integration, 3. Technical support interconnection, 4. Remote monitoring and status tracking. The management center is the convener of system management. The management center is responsible for inviting multiple personnel who will collaborate in inspection, monitoring, and management of factory equipment and lubrication points. The management center can set the jurisdiction of each personnel and standardize the work content according to the needs of its own factory management.



Smart control and management software can help you improve the efficiency of equipment lubrication, inspection and audit!

- Step1**  **Establish a Management Center** : Managers can plan inspection areas, groups, and personnel according to their own factory management needs, and authorize individual operation jurisdiction and execution scope hierarchically.
- Step2**  **Complete the Installation Registration** : Complete the registration of the operating area where the automatic lubricator is installed, equipment name, bearing specifications, operating conditions, lubrication specification calculation, lubricator model, applicable consumable specifications, etc. on **EasyLube® LINK**.
- Step3**  **Planning the Work Calendar** : Managers can plan the operation date of the replacement of consumables and the routine inspection of the factory in advance and let **EasyLube® LINK** remind the staff to execute it on time. It also provides various statistical data to help you, that includes the type and quantity of consumables that need to be replaced or identify abnormal problems in the area which you need to arrange staff to deal with.
- Step4**  **On-site Inspection Operation** : Multi-person and multi-tasking information integration. The staff can come on site to carry out inspection according to the duties assigned. You will only need to turn on **EasyLube® LINK** (NFC function), and after sensing the device, there will be an electronic inspection SOP to guide you to complete your work, and then upload the inspection report to the cloud.
- Step5**  **Remote Wireless Control** : Managers only need to turn on **EasyLube® LINK** to grasp the lubrication operation information in the factory (including whether the staff is on-site for inspection). There is also wireless instant notification for equipment abnormalities, allowing you to monitor anywhere and anytime with peace of mind.



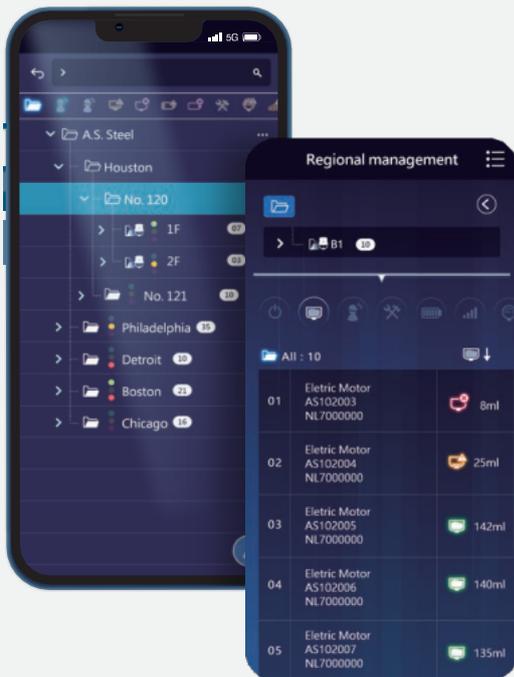
Remote Monitoring, Real-time Lubrication Information Management

The lubrication operation management of the equipment in the factory can be controlled remotely without going to the site through the data interconnection of the gateway. This includes factors that affect the normal operation of the equipment, network signals, grease injection, battery power, grease cup stock, pressure inside the grease injection pipe, ambient temperature, etc.. If there is an abrupt abnormality in the equipment, the staff can be notified in real-time through the gateway and be dealt with quickly and properly.

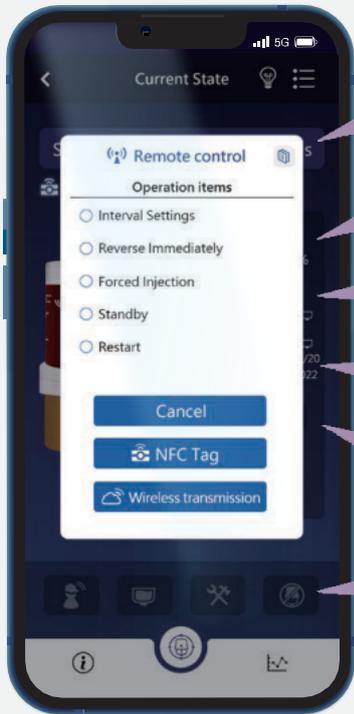
- Signal Strength
- Pipeline Pressure
- Battery Level
- Grease Level
- Real-time Information
- Ambient Temperature



Easily and Quickly Understand the Status of All Areas



EasyLube[®]LINK can communicate with Nexus devices all the time, allowing you to easily grasp the equipment lubrication information in all areas. Regardless of whether you filter by personnel group, equipment area or individual location, you can check the lubrication status of hundreds of lubricators in the factory anytime. Such as in which area, the lubricators have not been inspected on-site? Or which lubricators need to replace consumables, etc.. The lubrication status of the equipment in the factory can be understood simply, quickly and in real-time.



- Interval Settings
- Quick Reverse
- Forced Greasing
- Standby
- Restart
- Reconnect



Issue Control Instructions to Solve Problems Immediately

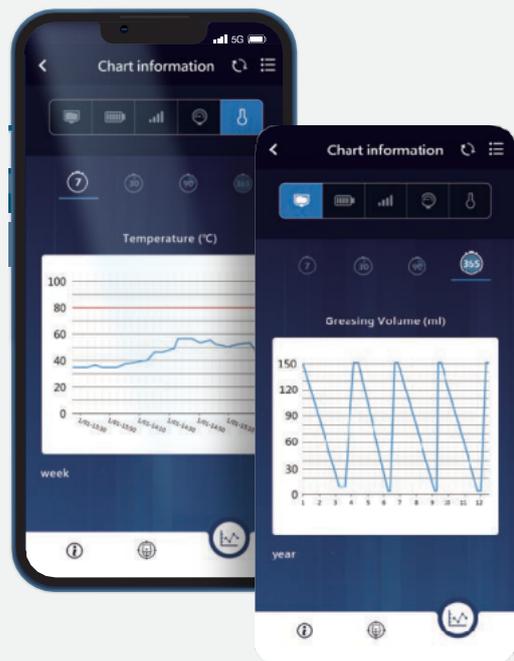
The **EasyLube® Nexus** lubricator will automatically detect the lubrication status around the clock during normal operation. Once it detects that the equipment is abnormal or the bearing temperature is too high, it will immediately notify the management center. The maintenance personnel can take appropriate remote actions such as forced injection, injecting an appropriate amount of grease immediately, to eliminate the high temperature status that may be caused by insufficient lubrication, remotely adjust the setting of grease injection, or notify the maintenance personnel to come to the site for inspection. This can greatly improve work efficiency and equipment safety by solving problems real-time, especially in the factory area that is not easy to inspect immediately, inconvenient for maintenance personnel to arrive, or difficult moments.



Prevention is the Best Maintenance

EasyLube® LINK can convert the data collected by the inspection records into data charts, helping managers understand the status and characteristics of the lubrication operation of the equipment within the plant, or analyze the trigger points of equipment abnormalities. Especially statistical analysis of the data chart that requires long-term records and data collection to carry out.

Management personnel can filter according to the operation period or other information to check the abnormality that occurs at a specific time, or to re-evaluate whether the bearing relubrication condition specifications are correct. By finding out the problem factors early, and solve them immediately, it can not only reduce the equipment failure rate effectively, but also improve equipment production utilization and efficiency!



Easytube[®] Nexus Gateway

Product Model : NX-GW-01

Long Receiving and Transmitting Distance



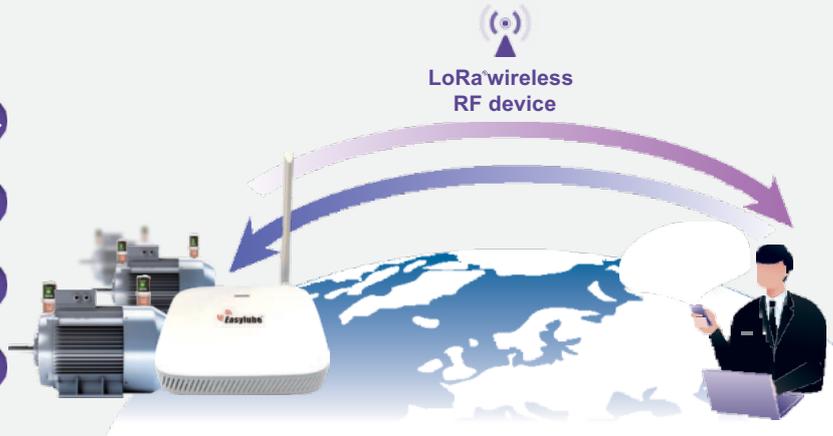
High Number of Connectable Lubricators



Affordable and Cost-effective



Works with LAN, Wi-Fi, or Mobile Network



The **Easytube[®] Nexus Gateway** utilizes Semtech's LoRa[®] wireless transmission technology, which not only provides long-distance transmission but also offers flexible network configuration, strong anti-interference capabilities, and low costs. It can maintain long-distance connectivity and demonstrate significant advantages in terms of high penetration and sensitivity even in harsh environments.

One Gateway can cover a radius of 2 kilometers and connect up to 1000 lubricators. If it is affected by environmental obstacles or signal frequency interference, additional gateway can also be added to obtain the best interconnection communication quality.

Easytube[®] Surface Temperature Sensor

Product Model : NX-ST5-01



Reinforced Protective Housing

IP66

CE CERTIFIED



FC



Wide Temperature Detection Range

Working Temperature : -20°C ~ +60°C

Detection Range : -30°C ~ +180°C



Intuitive Indicator Light Design

Normal Connection

Abnormal Status

Abnormal Connection

Low Battery

The Key to Maintaining Equipment Implement On-site Inspections



"On-site inspection" is one of the most important operations in equipment maintenance, so to confirm whether the automatic lubricator is functioning normally in accordance with the lubrication specifications? Including whether the grease injection pipe is leaking? Does the device make abnormal noise? Conditions such as abnormal vibration or temperature rise, can only be seen after the maintenance personnel arrive at the site.

Although the 5th generation **Easylube®** RFID lubricator has been designed with an NFC sensing mechanism for maintenance personnel to "inspect on-site", the inspection report is filled in manually, hence there may be human errors or false fillings. For example, the lubricator abnormal light is turned on or the grease injection tube has been loosened, but the staff reported that the "inspection is normal" after sensing to save trouble.

The new generation of **Easylube® Nexus** lubricator uses a readable and writable RFID chip. When maintenance personnel arrive at the site, the lubricator will automatically transmit the operation data to the **Easylube® LINK** management center after sensing the chip. This will then immediately complete the "electronic inspection record", hence completely avoid human error, negligence, or malpractice.

In contrast, many competing products use Bluetooth technology to communicate with the lubricator at a distance of 5-20M. However, the maintenance personnel still need to arrive at the lubrication site and pair the lubrication points individually to collect data; the Bluetooth technology emphasize that the maintenance personnel do not need to see the actual operation status of the lubrication point, but this will easily lead to mistakes by negligence, hence losing the meaning of conducting "on-site inspection". On the factory maintenance operation management level, this will have a negative impact.

Why doesn't **Easylube® Nexus** lubricator use Bluetooth technology ?

▲ Bluetooth technology requires personnel to go on-site to pair and connect individually to obtain lubrication point information, which misses the point of remote monitoring.

● The **Easylube® Nexus** lubricator adopts "wireless transmission technology". The status and information of the lubrication points are detected by the lubricator and can be obtained at any time and at any remote distance, in which truly achieves remote monitoring and management.

▲ Bluetooth technology emphasized that personnel do not need to actually see the lubrication points when they inspect on-site, hence there will be risks of equipment damage due to inspection negligence.

● The inspectors sense the RFID located at the indicator light via the NFC on the mobile phone and record the inspection report. This can ensure that each equipment maintenance record is actually carried out on-site to achieve the most complete maintenance work.

Smart Factory Focused Let's Move Towards Industry 4.0 Future Together

Facing the advent of the Industry 4.0 era, companies from all over the world are actively promoting relevant policies to cope with the trend, implementing smart factories as soon as possible, and enhancing the overall competitiveness of enterprises! However, reforming, innovating and overturning the operation model cannot be done hastily. Faced with this difficult challenge, the **EasyLube[®]** R&D team sincerely invites you to begin from the simplest, fastest and most economical "**EasyLube[®] Nexus** Smart Total Lubrication and Maintenance System". Through the remote control management system specially designed for you, together with automatic detection and wireless transmission technology, to help you quickly transform from traditional manual maintenance to automatic maintenance management, hence improving factory production efficiency, reduce maintenance labor costs, and transform into a Smart Management Factory.

EasyLube[®] Industrial Application



Steel



Cement



Rubber



Paper



Mining



Electronics



Thermal Processing



Food



Cannery / Brewery



Pharmaceutical



Power



Oil Refinery



Electric Motor



Crane / Production Storage Conveyor Belts



Blower / Extruder Lifting Wheel



Equipment of Stir Grind / Vibrate



Cooling Tower / Fan



Blower/ Exhaust Fan



Air Compressor



Sewage / Cooling Water Heat Medium Circulation Pump



Lifting Equipment Container Terminal



Air Conditioning Unit Waste Gas Valve



Heat Treatment Steam Boiler Forming Machine



Roller



Dust Collector Milling Machine Cut-off Machine



Bottle Washing Food Filling Meat Grinder



Examples of Safety Grid External Power Supply



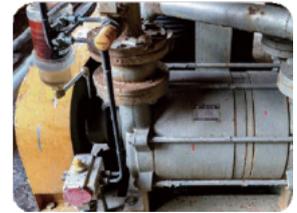
Fiber Mixer Sandblasting Machine

EasyLube® Application Example

🌐 Distributed In **54** Countries Across **5** Continents

👤 Effective Users Over **20,000** Enterprise Factories

📦 Over **5,000,000** Single-Point Automatic Lubricators Sold



Product Quality and Customer Satisfaction Guarantee Policy



The manufacturer, HORNCHE CORPORATION, provides a two-year quality warranty (starting from the day of delivery) to all customers of **EasyLube®** products to ensure that the products have great value. The customer must buy from the original manufacturer or from an authorized distributor to enjoy this guarantee. This guarantee is fully supported by the manufacturer HORNCHE CORPORATION. During the product warranty period, if the product purchased is found to have any manufacturing or material defects, defects in quality, or unsatisfactory functions, you can directly request free quality warranty service from the distributor, to guarantee 100% product quality and customer satisfaction.

This guarantee promises you 100% product quality and customer satisfaction. usage questions, feedback, or need technical advice, please don't hesitate to contact service@easylube.com immediately and we will be replying promptly.

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